Department of Commerce • National Oceanic & Atmospheric Administration • National Weather Service

NATIONAL WEATHER SERVICE INSTRUCTION 10-314 DECEMBER 23, 2004

Operations and Services
MARINE AND COASTAL WEATHER SERVICE PROGRAM, NWSPD 10-3
MARINE WEATHER STATEMENTS

NOTICE: This publication is available at: http://www.nws.noaa.gov/directives/

OPR: OS21 (J. Vavra) Certified by: OS21 (T. Pierce)

Type of Issuance: Emergency.

SUMMARY OF REVISIONS: This directive supersedes NWSI 10-314, dated July 16, 2004. This directive adds the Valid Time Event Code (VTEC) to a Marine Weather Statement (MWS) used to provide follow-up information to a Special Marine Warning. This directive changes the MWS to segmented format (section 2.3.4 and Appendix A), and provides software creation guidance for effective use of VTEC. The VTEC information in the product formats and examples will be operationally implemented at all WFOs after February 7, 2005. Information regarding implementation of VTEC is available at the following location: http://www.nws.noaa.gov/os/vtec/.

Signed by

December 9, 2004

Gregory A. Mandt Director, Office of Climate, Water, and Weather Services Date

NWSI 10-314 DECEMBER 23, 2004

MARINE WEATHER STATEMENTS

Ta	ble of Cont	ents:	Page
1.	Introducti	on	3
2.	Marine Weather Statement (MWS)		3
	2.1 Mi	ission Connection	3
	2.2 Iss	suance Guidelines	3
	2.2.1	Creation Software	3
	2.2.2	Issuance Criteria	3
	2.2.3	Issuance Time	4
	2.2.4	Valid Time	4
	2.2.5	Universal Geographic Code (UGC)	4
	2.2.6	Product Expiration Time	
	2.3 Te	echnical Description	
	2.3.1	MND Broadcast Line	4
	2.3.2	MND Header	4
	2.3.3	Content	
	2.3.4	Format	
	2.4 Up	odates, Amendments and Corrections	
Ap	pendix		
	A. Ex	camples of Marine Weather Statements	. A-1

- 1. <u>Introduction</u>. This procedural instruction provides detailed information on a product Weather Forecast Offices (WFOs) issue concerning ongoing or imminent marine weather hazards. Marine Weather Statements (MWSs) also provide the public with follow-up information or to cancel all or part of a Special Marine Warning (SMW) (reference NWSI 10-313).
- 2. Marine Weather Statement (product category MWS).
- 2.1 <u>Mission Connection</u>. Marine Weather Statements provide the public with detailed marine weather information describing non-severe, but potentially hazardous conditions; and to provide information for a variety of conditions not covered by warnings or routine forecasts. The MWS also provides follow-up information to Special Marine Warnings.

2.2 Issuance Guidelines.

- 2.2.1 <u>Creation Software</u>. WFOs will use <u>WarnGen</u>* to create and issue Marine Weather Statements to cancel, update, or expire Special Marine Warnings. WFOs should use AWIPS <u>Watch/Warning/Advisory (WWA)</u> software to create and issue Marine Weather Statements for non-severe and informational events.
- * Note: VTEC will only be included in Marine Weather Statements created by WarnGen that provide information to cancel, update, or expire a Special Marine Warning.
- 2.2.2 <u>Issuance Criteria</u>. WFOs will issue a Marine Weather Statement to provide notice a Special Marine Warning has expired, to cancel all or portions of a warning, or to provide updates to the warning.

WFOs should issue Marine Weather Statements to discuss ongoing hazards affecting, or expected to affect, the marine community. Each NWS office having Great Lakes or coastal waters forecast responsibility (Reference NWSI 10-302) will issue MWSs as necessary. Do not issue MWSs for the offshore or high seas areas.

<u>Non-Severe Short-term Events</u>. Forecasters may issue MWSs to describe short duration, non-severe, but potentially hazardous conditions, in which sustained winds or gusts to 33 knots are expected for 2 hours or less.

Non-Severe Long-term Events. Forecasters may issue MWSs to provide details on significant conditions prevailing for longer than 2 hours that affect marine operations. For example: low-water levels, dense fog, hazardous materials spills, trends for increasing and/or decreasing wind and wave/seas conditions, volcanic ash, or to advise for the potential development of warning conditions.

NWSI 10-314 DECEMBER 23, 2004

Forecasters may issue MWSs during coastal or lakeshore flood events to provide information specifically relating to mariners. WFOs may also issue MWSs to alert mariners of very significant weather features expected in the 3 to 5 day forecast period.

<u>Ice Changes</u>. WFOs should issue MWSs informing mariners of non-forecast weather events likely to impact the formation or destruction of ice.

- 2.2.3 <u>Issuance Time</u>. Marine Weather Statements are non-scheduled, event-driven products. WFOs should issue Marine Weather Statements at least every 1 to 3 hours when marine weather conditions consistent with the issuance criteria are present or forecast.
- 2.2.4 <u>Valid Time</u>. Marine Weather Statements are valid from the time of issuance until the expiration time.
- 2.2.5 <u>Universal Geographic Code (UGC)</u>. Marine Weather Statements will contain <u>marine-based</u> zone UGC codes.
- 2.2.6 <u>Product Expiration Time</u>. The product expiration time is not more than 15 minutes after the warning or expiration time of the SMW; and not more than 12 hours after the time of issuance for other events described in the issuance criteria section.
- 2.3 <u>Technical Description</u>. Marine Weather Statements will follow the format and content described in this section.
- 2.3.1 Mass News Disseminator Broadcast Line. None.
- 2.3.2 <u>Mass News Disseminator Header</u>. The Marine Weather Statement MND Header is "MARINE WEATHER STATEMENT".
- 2.3.3 <u>Content.</u> WFOs will issue MWSs to cancel all or portions of a Special Marine Warning. WFOs should issue MWSs for ongoing or imminent weather conditions less than warning criteria. WFOs should issue MWS's to report funnel clouds either forecast by the WFO or reported to the WFO by external sources. WFOs should use headlines to highlight important information related to the issuance of the MWS. MWSs will follow the format described in section 2.3.4.
- 2.3.4 <u>Format</u>. The format of the MWS can be seen in Figure 1. The MWS is a segmented product. Please reference NWSI 10-1702, Universal Geographic Code (UGC) for additional information on product segmentation. For detailed VTEC information, please reference NWSI 10-1703, Valid Time Event Code (VTEC). For more detailed product format information consult NWSI 10-1701, *Text Product Formats and Codes*.

NWSI 10-314 DECEMBER 23, 2004

This product is available in industry standard encoding and languages, and may include, but not be limited to, American Standard Code for Information Interchange, Extensible Markup Language, Wireless Markup Language and HyperText Markup Language.

(WMO HEADER)(ISSUANCE DATE TIME)
(AWIPS ID)

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE (CITY)(STATE)
(VALID TIME) AM/PM (LOCAL TIME ZONE) (DAY) (DATE)

(AREAL UGC CODE[S])-(EXPIRATION TIME)(VTEC STRING) *
(VALID TIME) AM/PM (LOCAL TIME ZONE) (DAY) (DATE)

...HEADLINE (If Needed)...

NARRATIVE TEXT.

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FORECASTER NAME (Optional)

* Used only in a Marine Weather Statement, created by WarnGen, to provide follow-up information to a Special Marine Warning.

Figure 1. Marine Weather Statement (MWS) Format

2.4 <u>Updates, Amendments and Corrections</u>. MWSs should be updated as needed. WFOs will correct MWSs for format and grammatical errors.

APPENDIX A - Examples of Marine Weather Statements

Note: Valid Time Event Code (VTEC) strings are only included in Marine Weather Statements created in WarnGen and used to provide follow-up information to a Special Marine Warning. Marine Weather Statements used to provide informational and/or non-severe marine information will not include VTEC at this time.

Examples of informational Marine Weather Statements (MWS's):

FZUS71 KOKX 181411 MWSOKX

MARINE WEATHER STATEMENT NATIONAL WEATHER SERVICE NEW YORK NY 1010 AM EDT WED AUG 18 2004

ANZ330-335-181600-1010 AM EDT WED AUG 18 2004

...THUNDERSTORMS MOVING EASTWARD ACROSS LONG ISLAND SOUND...

AT 1005 AM EDT...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED THUNDERSTORMS PRODUCING DANGEROUS LIGHTNING AND GUSTY WINDS OVER LONG ISLAND SOUND...WEST OF A LINE FROM NEW HAVEN CT TO PORT JEFFERSON NY...MOVING EAST AT 15 MPH.

MARINERS CAN EXPECT GUSTY WINDS UP TO 30 KNOTS...LOCALLY HIGHER WAVES...AND FREQUENT LIGHTNING STRIKES. BOATERS SHOULD SEEK SAFE HARBOR IMMEDIATELY UNTIL THIS STORM PASSES.

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FZUS74 KBRO 012044 MWSBRO

MARINE WEATHER STATEMENT NATIONAL WEATHER SERVICE BROWNSVILLE TX 345 PM CDT SAT MAY 1 2004

GMZ130-150-155-170-175-012345-345 PM CDT SAT MAY 1 2004

 \ldots A STRONG COLD FRONT HAS PASSED SOUTH OF THE LOWER TEXAS COASTAL WATERS...

A LATE SEASON COLD FRONT HAS JUST MOVED THROUGH THE LOWER TEXAS COASTAL WATERS. THE STRONGEST THUNDERSTORMS ARE NOW IN THE OPEN GULF TO THE EAST OF THE OFFSHORE WATERS. MARINERS OVER THE LAGUNA MADRE AND THE COASTAL WATERS OF DEEP SOUTH TEXAS SHOULD STILL EXPECT NUMEROUS SHOWES AND THUNDERSTORMS TO CONTINUE DURING THE NEXT FEW HOURS...BUT DRIER WEATHER IS EXPECTED TO ARRIVE THIS EVENING. OCCASIONAL LIGHTNING AND HEAVY RAINFALL RESTRICTING VISIBILITY TO LESS THAN A MILE WILL REMAIN POSSIBLE.

WINDS BEHIND THE FRONT ARE EXPECTED TO PERSIST FROM THE NORTH AT 20 TO 30 KNOTS...WITH HIGHER GUSTS POSSIBLE. AT 200 PM...SEAS HAD RISEN TO 7 FEET AT THE BUOY 35 MILES EAST OF PORT MANSFIELD AND WERE STILL RISING. SMALL CRAFT ADVISORIES FOR WINDS AND SEAS ARE LIKELY THROUGH SUNDAY.

STAY TUNED TO NOAA WEATHER RADIO FOR THE LATEST WEATHER INFORMATION FROM YOUR NATIONAL WEATHER SERVICE OFFICE IN BROWNSVILLE.

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Example of a Special Marine Warning (SMW) and followup Marine Weather Statement (created using WarnGen and including VTEC):

1. Initial SMW:

WHUS53 KLOT 232205 SMWCHI LMZ740-766-232300-/O.NEW.KLOT.MA.W.0034.050723T2204Z-050723T2300Z/

BULLETIN - IMMEDIATE BROADCAST REQUESTED SPECIAL MARINE WARNING NATIONAL WEATHER SERVICE CHICAGO IL 504 PM CDT SAT JUL 23 2005

THE NATIONAL WEATHER SERVICE IN CHICAGO HAS ISSUED A

* SPECIAL MARINE WARNING FOR...
WINTRHOP HARBOR TO WILMETTE HARBOR IL OVER LAKE MICHIGAN
OUT TO MID LAKE

* UNTIL 6 PM CDT

* AT 455 PM CDT...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A LINE OF STRONG THUNDERSTORMS FROM NEAR RACINE WISCONSIN SOUTHWESTWARD INLAND TO NEAR WAUCONDA ILLINOIS...MOVING SOUTHEAST AT 30 MPH.

MARINERS SHOULD SEEK SAFE HARBOR IMMEDIATELY. IF CAUGHT ON OPEN WATER STAY BELOW DECK IF POSSIBLE...KEEP AWAY FROM UNGROUNDED METAL OBJECTS.

LAT...LON <placeholder for coordinates>

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2. MWS used to update the SMW:

FZUS73 KLOT 232230 MWSCHI

MARINE WEATHER STATEMENT NATIONAL WEATHER SERVICE CHICAGO IL 530 PM CDT SAT JUL 23 2005

LMZ740-766-232300-/O.CON.KLOT.MA.W.0034.000000T0000Z-050723T2300Z/ 530 PM CDT SAT JUL 23 2005

...SPECIAL MARINE WARNING REMAINS IN EFFECT FOR WINTRHOP HARBOR TO WILMETTE HARBOR IL OVER LAKE MICHIGAN OUT TO MID LAKE UNTIL 6 PM...

AT 525 PM...A LINE OF STRONG THUNDERSTORMS CONTINUED FROM NEAR RACINE WISCONSIN SOUTHWESTWARD INLAND TO NEAR WAUCONDA ILLINOIS. AT 523 PM...A MARINER REPORTED GOLFBALL SIZE HAIL ON LAKE MICHIGAN 5 MILES SOUTHEAST OF RACINE. THESE STORMS WILL CONTINUE MOVING SOUTHEAST AT 30 MPH.

LAT...LON <placeholder for coordinates>

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3. MWS used to cancel the SMW:

FZUS73 KLOT 232235 MWSCHI

MARINE WEATHER STATEMENT NATIONAL WEATHER SERVICE CHICAGO IL 535 PM CDT SAT JUL 23 2005

LMZ740-766-232300-/O.CAN.KLOT.MA.W.0034.000000T0000Z-050723T2300Z/ 535 PM CDT SAT JUL 23 2005

...SPECIAL MARINE WARNING FOR WINTRHOP HARBOR TO WILMETTE HARBOR IL CANCELLED...

A LINE OF THUNDERSTORMS FROM NEAR RACINE WISCONSIN SOUTHWESTWARD TO NEAR WAUCONDA ILLINOIS HAVE DISSIPATED. THEREFORE THE SPECIAL MARINE WARNING HAS BEEN CANCELED.

LAT...LON <placeholder for coordinates - last valid area of the polygon>

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4. MWS used to cancel part of the SMW:

FZUS73 KLOT 232235 MWSCHI

MARINE WEATHER STATEMENT NATIONAL WEATHER SERVICE CHICAGO IL 535 PM CDT SAT JUL 23 2005

LMZ740-232300-/O.CAN.KLOT.MA.W.0034.000000T0000Z-050723T2300Z/ 535 PM CDT SAT JUL 23 2005

...SPECIAL MARINE WARNING FOR WINTRHOP HARBOR TO WILMETTE HARBOR IL CANCELLED...

A LINE OF THUNDERSTORMS FROM NEAR RACINE WISCONSIN SOUTHWESTWARD TO NEAR WAUCONDA ILLINOIS HAVE MOVED EAST OVER THE OPEN LAKE. THEREFORE THE SPECIAL MARINE WARNING HAS BEEN CANCELED FOR NEARSHORE WINTRHOP HARBOR TO WILMETTE HARBOR IL.

LAT...LON <placeholder for coordinates> <valid area of the warning still in effect>

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LMZ766-232300-/O.CON.KLOT.MA.W.0034.000000T0000Z-050723T2300Z/ 535 PM CDT SAT JUL 23 2005

...SPECIAL MARINE WARNING REMAINS IN EFFECT FOR LAKE MICHIGAN WINTHROP HARBOR IL EASTWARD TO MID POINT OF THE LAKE AND SOUTHWARD TO NEW BUFFALO MI BEYOND 5 NM OFF SHORE...

AT 530 PM...A LINE OF STRONG THUNDERSTORMS WAS NEAR THE MID POINT OF SOUTHERN LAKE MICHIGAN. AT 528 PM...A MARINER REPORTED BASEBALL SIZE HAIL ON LAKE MICHIGAN 15 MILES SOUTHEAST OF WAUKEGAN IL. THESE STORMS WILL CONTINUE MOVING SOUTHEAST AT 30 MPH.

LAT...LON <placeholder for coordinates> <valid area of the warning still in effect>

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5. MWS used to expire the SMW:

FZUS73 KLOT 232300 MWSCHI

MARINE WEATHER STATEMENT NATIONAL WEATHER SERVICE CHICAGO IL 600 PM CDT SAT JUL 23 2005

LMZ740-766-232300-/O.EXP.KLOT.MA.W.0034.000000T0000Z-050723T2300Z/ 600 PM CDT SAT JUL 23 2005

...SPECIAL MARINE WARNING FOR WINTRHOP HARBOR TO WILMETTE HARBOR IL OVER LAKE MICHIGAN OUT TO MID LAKE HAS EXPIRED...

A LINE OF THUNDERSTORMS FROM NEAR RACINE WISCONSIN SOUTHWESTWARD TO NEAR WAUCONDA ILLINOIS HAVE DISSIPATED. THEREFORE THE SPECIAL MARINE WARNING HAS BEEN ALLOWED TO EXPIRE.

LAT...LON <placeholder for coordinates - last valid area of the polygon>

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